

The block diagram illustrates the internal architecture of a game machine 10. The machine is enclosed in a dashed-line boundary. Key components include:

- EXTERNAL INPUT**: An input line from the left that branches to the **SIGNAL PROCESSOR** (26) and the **INPUT POSITION DETECTOR** (34).
- OPERATING PORTION** (27): Located at the top, it connects to the **SIGNAL PROCESSOR** (26) and the **GAME SELECTOR** (28).
- SIGNAL PROCESSOR** (26): Receives input from the **EXTERNAL INPUT** and the **OPERATING PORTION**, and sends data to the **CONTROLLER** (20).
- GAME SELECTOR** (28): Receives input from the **OPERATING PORTION** and sends data to the **CONTROLLER** (20).
- STORAGE** (22): Connected to the **CONTROLLER** (20) via a bidirectional arrow.
- CONTROLLER** (20): The central processing unit that manages the game logic, receiving data from the **SIGNAL PROCESSOR** (26), **GAME SELECTOR** (28), and **STORAGE** (22), and sending control signals to the **INPUT POSITION DETECTOR** (34), **DISPLAY DRIVER** (30), and **SOUND GENERATOR** (24).
- INPUT POSITION DETECTOR** (34): Receives input from the **EXTERNAL INPUT** and the **CONTROLLER** (20), and sends data to the **CONTROLLER** (20).
- DISPLAY DRIVER** (30): Receives control signals from the **CONTROLLER** (20) and sends data to the **DISPLAY** (31).
- DISPLAY** (31): The output screen for the game, which also provides feedback to the **INPUT POSITION DETECTOR** (34).
- SOUND GENERATOR** (24): Receives control signals from the **CONTROLLER** (20) and sends data to the **SPEAKER DRIVER** (32).
- SPEAKER DRIVER** (32): Receives control signals from the **SOUND GENERATOR** (24) and sends data to the **SPEAKER** (33).
- SPEAKER** (33): The audio output device.

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graph TD
    EXTERNAL_INPUT[EXTERNAL INPUT] --> SIGNAL_PROCESSOR[26 SIGNAL PROCESSOR]
    EXTERNAL_INPUT --> INPUT_POSITION_DETECTOR[34 INPUT POSITION DETECTOR]
    OPERATING_PORTION[27 OPERATING PORTION] --> SIGNAL_PROCESSOR
    OPERATING_PORTION --> GAME_SELECTOR[28 GAME SELECTOR]
    SIGNAL_PROCESSOR --> CONTROLLER[20 CONTROLLER]
    GAME_SELECTOR --> CONTROLLER
    STORAGE[22 STORAGE] <--> CONTROLLER
    CONTROLLER --> INPUT_POSITION_DETECTOR
    CONTROLLER --> DISPLAY_DRIVER[30 DISPLAY DRIVER]
    CONTROLLER --> SOUND_GENERATOR[24 SOUND GENERATOR]
    INPUT_POSITION_DETECTOR --> CONTROLLER
    DISPLAY_DRIVER --> DISPLAY[31 DISPLAY]
    DISPLAY --> INPUT_POSITION_DETECTOR
    SOUND_GENERATOR --> SPEAKER_DRIVER[32 SPEAKER DRIVER]
    SPEAKER_DRIVER --> SPEAKER[33 SPEAKER]
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FIG. 2

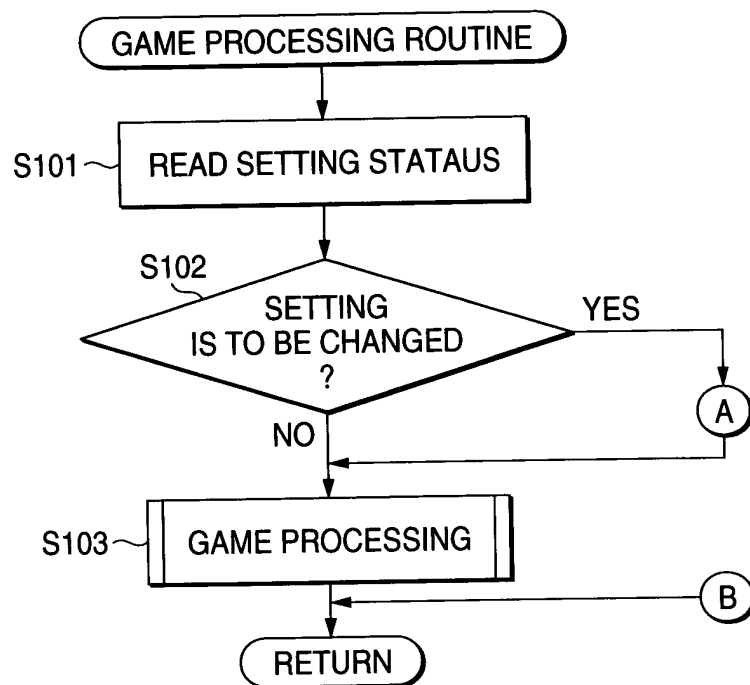


FIG. 3

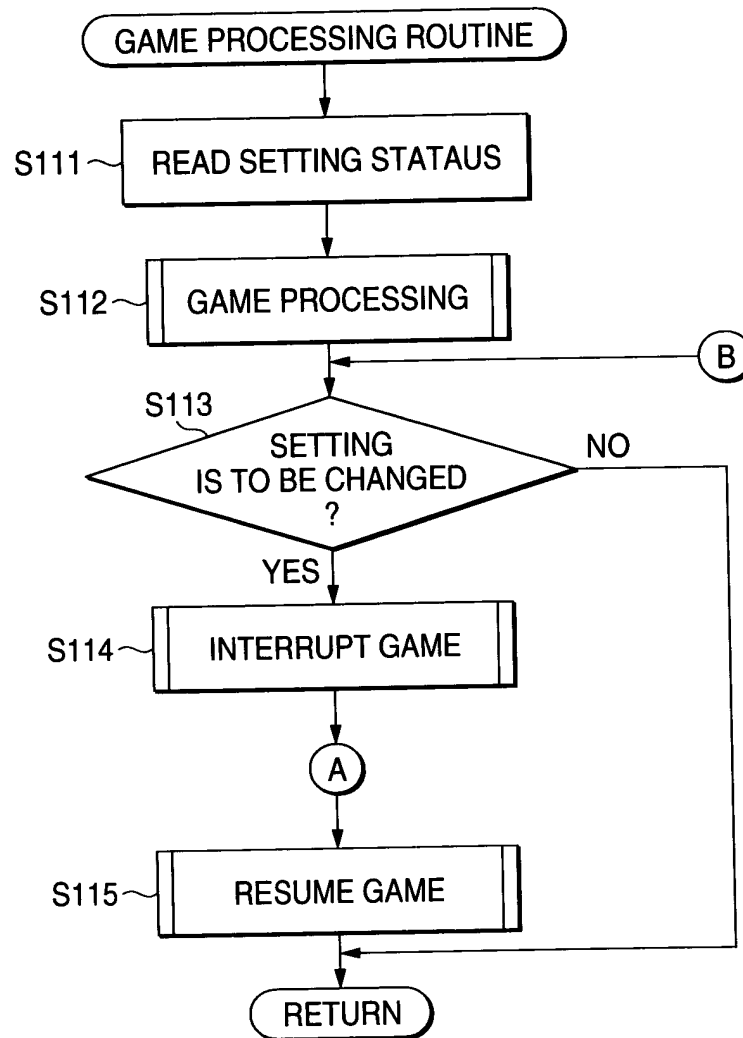


FIG. 4A

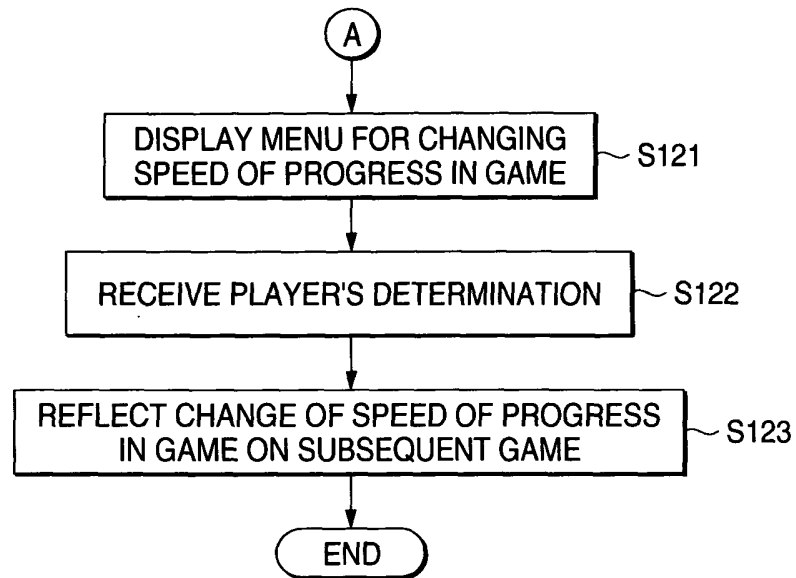
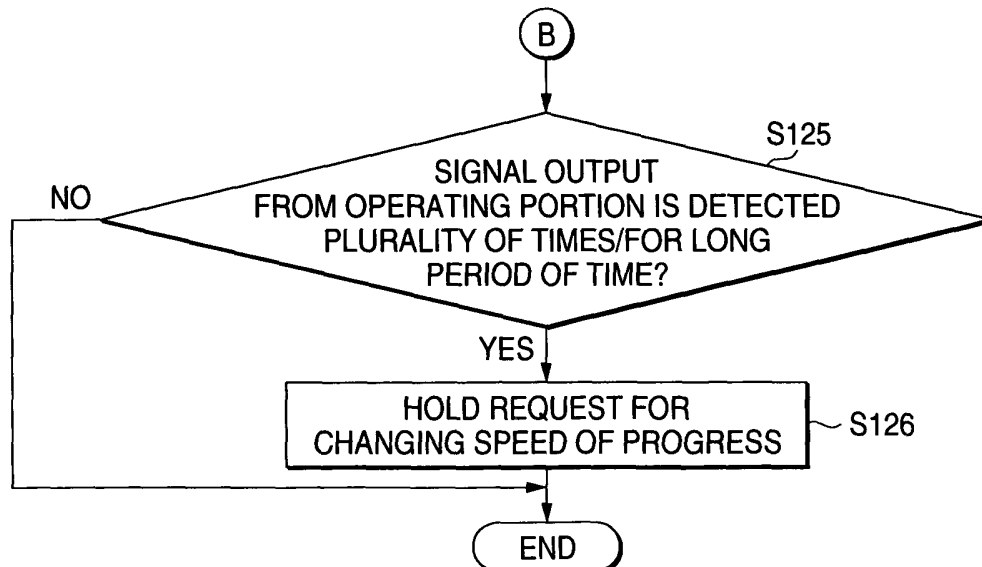


FIG. 4B



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FIG. 5

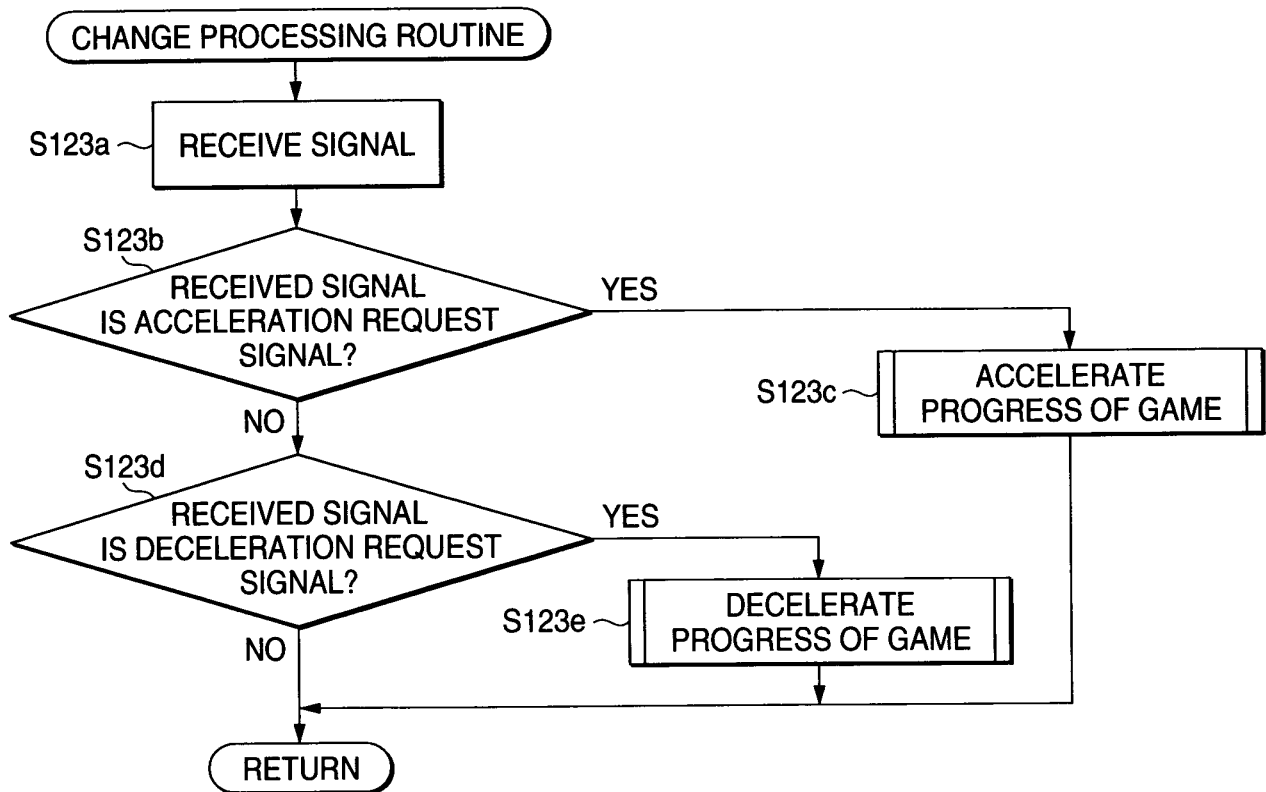


FIG. 6

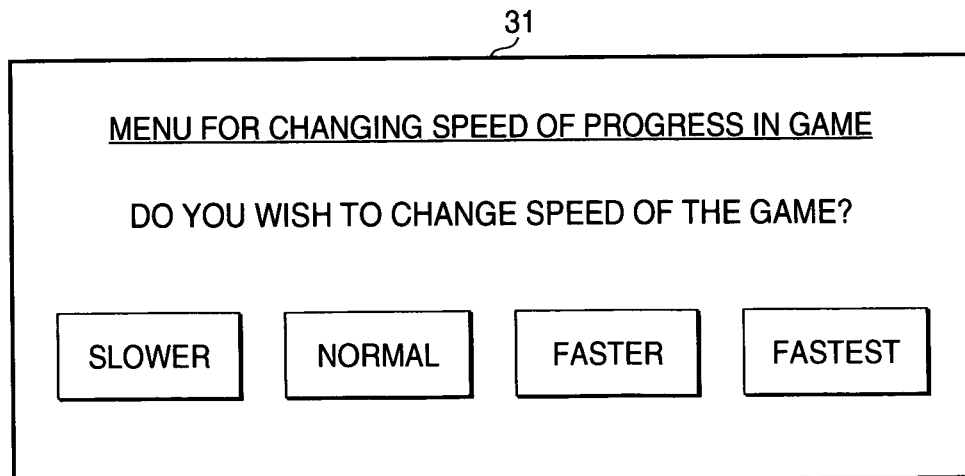


FIG. 7A

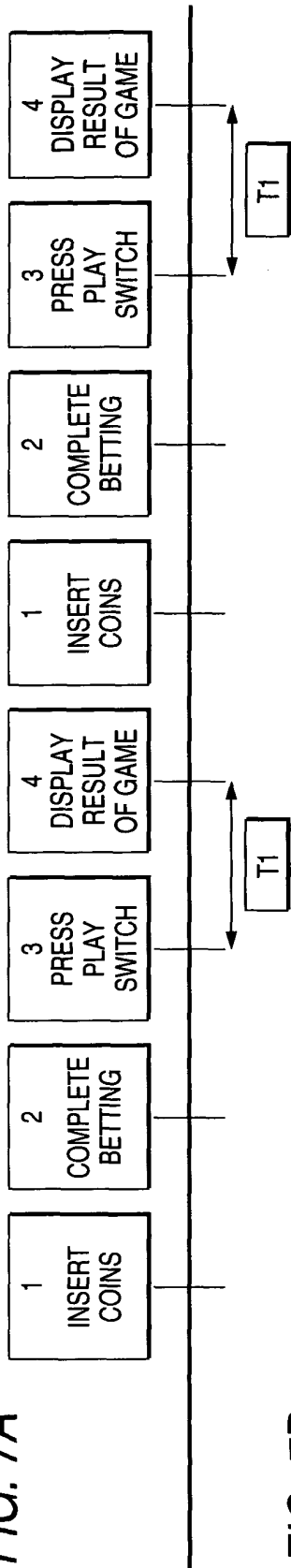


FIG. 7B

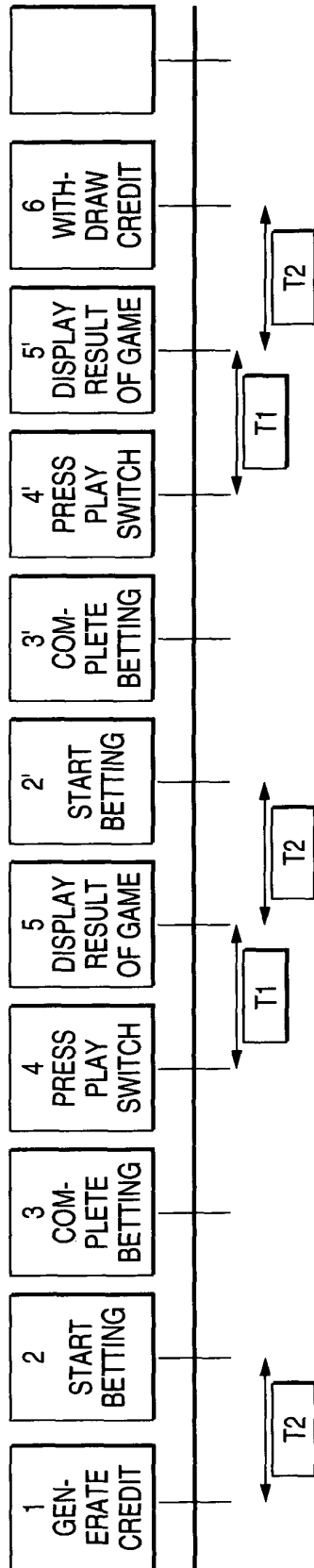
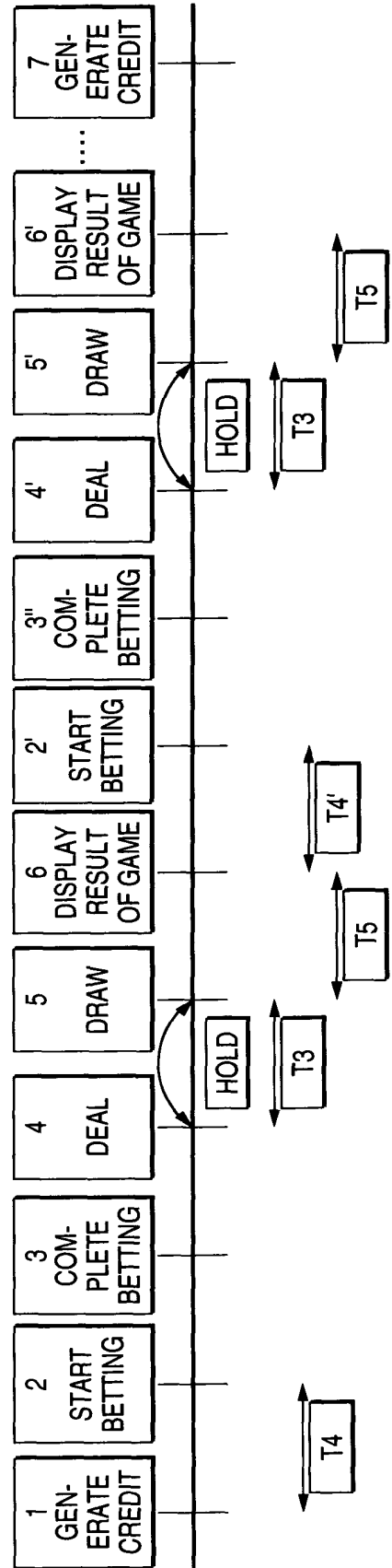


FIG. 7C



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FIG. 8

